Structure determination of ammonia on Cu(110) – a low-symmetry adsorption site
N.A. Booth, R. Davis, R. Toomes, D.P. Woodruff, C. Hirschmugl, K.M. Schindler, O. Schaff, V. Fernandez, A. Theobald, Ph. Hofmann, R. Lindsay, T. Gießel, P. Baumgärtel and A.M. Bradshaw 152

On the dissociative adsorption of O_2 on Ga-rich GaAs(100) at submonolayer coverages
L.K. Verheij 160

Effect of kinks and concerted diffusion mechanisms on mass transport and growth on stepped metal surfaces
J. Merikoski, I. Vattulainen, J. Heinonen and T. Ala-Nissila 167

Incommensurate growth and interface stability in MgO/$SrTiO_3$(001)
G. Chern 183

The oxidation kinetics of Mg and Al surfaces studied by AES and XPS
T. Do, S.J. Splinter, C. Chen and N.S. McIntyre 192

XPS characterization of the reactions of Li with tetrahydrofuran and propylene carbonate
G. Zhuang, K. Wang and P.N. Ross, Jr. 199

Surface alloying at InAs–GaAs interfaces grown on (001) surfaces by molecular beam epitaxy
J.G. Belk, C.F. McConville, J.L. Sudijono, T.S. Jones and B.A. Joyce 213

Friction force studies on layered materials using an Atomic Force Microscope
H. Klein, D. Pailharey and Y. Mathey 227

Morphology and CO adsorptive properties of CuCl polycrystalline films: a SEM and FTIR study
D. Scarano, P. Galletto, C. Lamberti, R. De Franceschi and A. Zecchina 236

The adsorption of silicon on Cu(111) and the initial stages of oxidation of the silicon–copper interface
A.W. Robinson, P. Gardner, A.P.J. Stampfl, R. Martin and G. Nyberg 243

Growth morphology and electronic properties of ultra-thin Al films on Pt(111)
K. Wilson, J. Brake, A.F. Lee and R.M. Lambert 257

In situ STM and AES studies on the oxidation of Cr(110)
M. Müller and H. Oechsner 269

The complex tensor components of the nonlinear susceptibility $\chi^{(2)}$ of C(100) and of the C/Si(100) interface
R. Schliesing, G. Eichhorn, X. Jiang and H. Zacharias 279

Experimental and theoretical tests of elastic scattering effects in XPS
A. Jablonski and J. Zemek 288

Theoretical study of nitrogen adsorption on Zr(0001) surface
M. Yamamoto, M. Kurahashi, C.T. Chan, K.M. Ho and S. Naito 300

Adsorption of CO and NO on NiO(111)/Ni(111) surface studied by infrared–visible sum frequency generation spectroscopy
A. Bandara, S. Dobashi, J. Kubota, K. Onda, A. Wada, K. Domen, C. Hirose and S.S. Kano 312

Adsorption of hydrogen on the Pt(111) surface from low-energy recoil scattering
K. Umezawa, T. Ito, M. Asada, S. Nakanishi, P. Ding, W.A. Lanford and B. Hjörvarsson 320

Activation of O_2 on Cu, Ag, and Au surfaces for the epoxidation of ethylene: dipped adcluster model study
H. Nakatsuji, Z.-M. Hu, H. Nakai and K. Ikeda 328

Structure and morphology of the as-polished diamond(111)-1 × 1 surface
W.J. Huisman, J.F. Peters, S.A. de Vries, E. Vlieg, W.-S. Yang, T.E. Derry and J.F. van der Veen 342

A theoretical study of the stability and electronic structure of the polar {111} face of MgO
A. Pojani, F. Finocchi, J. Goniakowski and C. Noguera 354

Electronic structure of (111)-GaAsP/AlGaAs strained-layer quantum wells
X. Zhang, M. Ishikawa, H. Yaguchi and K. Onabe 371

Author index 383

Subject index 386

Materials index 392